VOLUME 32 CONTENTS

Vol. 32, No. 1

J. Kindangen, G. Krauss and **P. Depecker**	1	Effects of roof shapes on wind-induced air motion inside buildings
J. Virgone, P. Depecker and **G. Krauss**	13	Computer simulation of glass temperatures in fire conditions
K. H. Yang and **C. H. Su**	25	An approach to building energy savings using the PMV index
R. Holz, A. Hourigan, R. Sloop, P. Monkman and **M. Krarti**	31	Effects of standard energy conserving measures on thermal comfort
D. Tang	45	Object technology in building environmental modelling
M. A. Sanjuán and **R. Muñoz-Martialay**	51	Variability of the concrete air permeability coefficient with time
A. S. Hanna and **A. B. Senouci**	57	Material cost minimization of concrete wall forms
A. Malama and **S. Sharples**	69	Thermal performance of traditional and contemporary housing in the cool season of Zambia
Announcements	79	

Vol. 32, No. 2

D. A. Coley and **J. A. Crabb**	81	An artificial intelligence approach to the prediction of natural lighting levels
A. Soler and **P. Oteiza**	87	Light shelf performance in Madrid, Spain
M. D. Lyberg	95	Basic air infiltration
A. K. Melikov, U. Krüger, G. Zhou, T. L. Madsen and **G. Langkilde**	101	Air temperature fluctuations in rooms
P. Taffé	115	A qualitative response model of thermal comfort
Tianzhen Hong and **Yi Jiang**	123	A new multizone model for the simulation of building thermal performance
M. Erlandsson, P. Levin and **L. Myhre**	129	Energy and environmental consequences of an additional wall insulation of a dwelling
L. Serres, A. Trombe and **J. H. Conilh**	137	Study of coupled energy saving systems sensitivity factor analysis
Kee-Chiang Chung, Che-Ming Chiang and **Wen-An Wang**	149	Predicting contaminant particle distributions to evaluate the environment of lavatories with floor exhaust ventilation
M. Zakeri, P. Olomolaiye, G. D. Holt and **F. C. Harris**	161	Factors affecting the motivation of Iranian construction operatives
		Technical Note
R. Borchiellini	167	Function estimation of ventilation rates from tracer gas measurement

Vol. 32, No. 3

M. Y. L. Chew and **Lee Der Yi**	187	Elastic recovery of sealants
A. J. Klemm and **P. Klemm**	195	Ice formation in pores in polymer modified concrete—I. The influence of the admixtures on the water to ice transition

A. J. Klemm and **P. Klemm**	199	Ice formation in pores in polymer modified concrete—II. The influence of the admixtures on the water to ice transition in cementitious composites subjected to freezing/thawing cycles
M. S. Al-Homoud	203	Optimum thermal design of air-conditioned residential buildings
H. Kubo, N. Isoda and **H. Enomoto-Koshimizu**	211	Cooling effects of preferred air velocity in muggy conditions
Tianzhen Hong, Jinqian Zhang and **Yi Jiang**	219	IISABRE: an integrated building simulation environment
E. Erell and **H. Tsoar**	225	An experimental evaluation of strategies for reducing airborne dust in desert cities
S. Sharples and **A. Malama**	237	A thermal comfort field survey in the cool season of Zambia
Å. Jönsson, A-M. Tillman and **T. Svensson**	245	Life cycle assessment of flooring materials: case study
Tan Siew Ann and **Fwa Tien Fang**	257	Pavement evaluation for thermal/glare comfort during footdrills
H. I. Al-Abdul Wahhab and **I. M. Asi**	271	Improvement of marl and dune sand for highway construction in arid areas
P. Pasanen, P. Kalliokoski and **A.-L. Pasanen**	281	The effectiveness of some disinfectants and detergents against microbial activity
A. B. Ngowi	289	Virtues of construction training in traditional societies

Vol. 32, No. 4

G. Krauss, J. I. Kindangen and **P. Depecker**	295	Using artificial neural networks to predict interior velocity coefficients
M. J. Clifford, P. J. Everitt, R. Clarke and **S. B. Riffat**	305	Using computational fluid dynamics as a design tool for naturally ventilated buildings
Tang Mingfang and **Chen Qigao**	313	A simple expression for internal surface temperature distribution in corners of external walls
K. Adalberth	317	Energy use during the life cycle of buildings: a method
K. Adalberth	321	Energy use during the life cycle of single-unit dwellings: examples
W. Marks	331	Multicriteria optimisation of shape of energy-saving buildings
Fan Wang and **I. C. Ward**	341	Modelling multiple radon entry and transport in a domestic dwelling
C. K. Man and **H. S. Yeung**	351	The effects of cracks and holes on the exhalation of radon from concrete
C. Y. H. Chao, T. C. W. Tung, D. W. T. Chan and **J. Burnett**	355	Determination of radon emanation and back diffusion characteristics of building materials in small chamber tests
P. Oteiza and **A. Soler**	363	Experimental analysis for Madrid, Spain, of a simple graphic daylight calculation method based on the CIE standard overcast sky
R. H. Ramadhan and **H. I. Al-Abdul Wahhab**	367	Temperature variation of flexible and rigid pavements in Eastern Saudi Arabia
M. Samir Abdel-Azim	375	Development of prototype structure for low-cost and energy-efficient house by utilizing palm tree fronds
M. M. Idris	381	Some problems of water leaks in bathrooms of the University staff flats in Riyadh

Vol. 32, No. 5

H. Li, V. Li and **M. Skitmore**	389	Comparative study of analytical rental model and statistical models for predicting house rental levels
B. J. Taylor and **M. S. Imbabi**	397	The effect of air film thermal resistance on the behaviour of dynamic insulation
A. K. Athienitis, C. Liu, D. Hawes, D. Banu and **D. Feldman**	405	Investigation of the thermal performance of a passive solar test-room with wall latent heat storage
T. Mingfang and **C. Qigao**	411	Numerical simulation of thermal performance of a square column
G. P. de Vos and **B. W. J. van Rensburg**	417	Lightweight cold-formed portal frames for developing countries
M. G. Davies	427	Wall transient heat flow using time-domain analysis
E. H. Mathews, Y. Etzion, E. van Heerden, S. Weggelaar, E. Erell, D. Pearlmutter and **I. A. Meir**	447	A novel thermal simulation model and its application on naturally ventilated desert buildings
D. Tang	457	Temperature distribution and heat transfer through a homogeneous corner
S. E. G. Jayamaha, N. E. Wijeysundera and **S. K. Chou**	465	Effect of rain on the heat gain through building walls in tropical climates
J. Boland	479	Simplifying the solution of the differential equations which describe heat flows in domestic dwellings
R. Foregger	485	Windowless structures; annotated bibliography

Vol. 32, No. 6

Shia-Hui Peng, S. Holmberg and **L. Davidson**	497	On the assessment of ventilation performance with the aid of numerical simulations
A. J. Klemm and **P. Klemm**	509	The effects of the alternate freezing and thawing cycles on the pore structure of cementitious composites modified by MHEC and PVA
Shia-Hui Peng and **L. Davidson**	513	Towards the determination of regional purging flow rate
C. Y. H. Chao, T. C. W. Tung and **J. Burnett**	527	Influence of ventilation on indoor radon level
Y. K. Chuah, Y. M. Fu, C. C. Hung and **P. C. Tseng**	535	Concentration variations of pollutants in a work week period of an office
W. Lu, A. T. Howarth and **A. P. Jeary**	541	Prediction of airflow and temperature field in a room with convective heat source
Y. Zhang and **F. Haghighat**	551	The impact of surface air movement on material emissions
	i	Volume Contents and Author Index for Volume 32, 1997